AMENDMENTS TO THE CLAIMS:

- 1. (Previously presented) An optical device comprising
 - an anode;
 - a cathode comprising barium, strontium or calcium; and
- a layer of solution processable organic semiconducting material between the anode and the cathode

wherein a layer of cross-linked hole transporting and electron blocking material is located between the anode and the layer of organic solution processable semiconducting material.

- 2. (Previously presented) An optical device according to claim 1 that is an electroluminescent device.
- 3. (Previously presented) An optical device according to claim 2 that is a full color device wherein the layer of organic semiconducting material comprises red, green and blue electroluminescent materials.
- 4. (Previously presented) An optical device according to claim 1 wherein the cathode comprises barium.
- 5. (Previously presented) An optical device according to claim 1 wherein the layer of cross-linked hole transporting and electron blocking material comprises a triarylamine.
- 6. (Previously presented) An optical device according to claim 5 wherein the triarylamine is provided as repeat units of a polymer.

- 7. (Previously presented) An optical device according to claim 6 wherein the polymer is a copolymer comprising one or more arylene co-repeat units.
- 8. (Previously presented) An optical device according to claim 7 wherein at least one of the arylene co-repeat units is selected from the group consisting of optionally substituted fluorene, spirofluorene, indenofluorene and phenylene.
- 9. (Currently amended) An optical device according to claim 6 wherein the [the] triarylamine repeat unit is selected from the group consisting of repeat units of formulae 1-6:

wherein X, Y, A, B, C, and D are independently selected from H or a substituent group.

10. (Previously presented) An optical device according to claim 1 wherein the layer of organic semiconducting material is a semiconducting polymer.

- 11. (Previously presented) An optical device comprising a semiconducting copolymer according to claim 27 wherein the semiconducting copolymer comprises repeat units selected from the group consisting of optionally substituted fluorene, spirofluorene, indenofluorene and phenylene.
- 12. (Previously presented) An optical device comprising a semiconducting copolymer according to claim 10 wherein said polymer is a semiconducting copolymer comprising a repeat unit selected from triarylamine repeat units of formulae 1-6:

wherein X, Y, A, B, C, and D are independently selected from H or a substituent group.

13. (Previously presented) An optical device according to claim 12 wherein said copolymer comprises at least one co-repeat unit comprising a repeat unit of formula (I):

(I)

wherein each R is independently selected from the group consisting of H or optionally substituted, branched or linear alkyl, aryl, perfluoroalkyl, thioalkyl, cyano, alkoxy, heteroaryl, alkylaryl and arylalkyl groups.

- 14. (Previously presented) An optical device according to 12 wherein the molar ratio of the triarylamine repeat units is less than or equal to 50 %.
- 15. (Previously presented) An optical device according to claim 1 wherein a layer of hole injecting material is located between the anode and the layer of hole transporting and electron blocking material.
- 16. (Previously presented) An optical device according to claim 15 wherein the layer of hole injecting material is poly(ethylene dioxythiophene).
- 17. (Previously presented) An optical device according to claim 1 wherein the cathode comprises elemental barium.
 - 18. (Withdrawn) A method of forming an optical device comprising
 - providing a substrate comprising an anode;
- depositing a layer of hole transporting and electron blocking material onto the anode;

- depositing a layer of organic semiconducting material over the layer of hole transporting and electron blocking material; and
- depositing a cathode comprising barium, strontium or calcium over the layer of organic semiconducting material.
- 19. (Withdrawn) A method according to claim 18 comprising depositing a layer of hole injecting material between the anode and the layer of hole transporting and electron blocking material.
- 20. (Withdrawn) A method according to claim 18 comprising depositing both the layer of hole transporting and electron blocking material and the layer of organic semiconducting material from solution.
- 21. (Withdrawn) A method according to claim 20 wherein both the layer of hole transporting and electron blocking material and the layer of organic semiconducting material are polymers.
- 22. (Withdrawn) A method according to claim 20 comprising subjecting the hole transporting and electron blocking layer to heat treatment prior to deposition of the organic semiconducting material.
- 23. (Withdrawn) A method according to claim 22 wherein the heat treatment is below the glass transition temperature of the hole transporting and electron blocking material.
- 24. (Withdrawn) A method according to claim 20 wherein the organic semiconducting material is substantially free of cross-linkable vinyl or ethynyl groups

- 25. (Previously presented) An optical device according to claim 7 wherein at least one of the arylene co-repeat units is 9,9-disubstituted fluorene-2,7-diyl.
- 26. (Previously presented) An optical device according to claim 9, wherein at least one of X, Y, A, B, C, and D is independently selected from the group consisting of optionally substituted, branched or linear alkyl, aryl, perfluoroalkyl, thioalkyl, cyano, alkoxy, heteroaryl, alkylaryl and arylalkyl groups.
- 27. (Previously presented) An optical device according to claim 1 wherein the layer of organic semiconducting material is a semiconducting copolymer.
- 28. (Previously presented) An optical device according to claim 11 wherein the repeat units comprise 9,9-disubstituted fluorene-2,7-diyl.
- 29. (Previously presented) An optical device of claim 13 wherein at least one R is a C_{1-10} alkyl group.
- 30. (Previously presented) An optical device of claim 13 wherein at least one R is a butyl group.
- 31. (Previously presented) An optical device according to claim 14 wherein the molar ratio of the triarylamine repeat units is less than or equal to 30 %.
- 32. (Previously presented) An optical device according to claim 14 wherein the molar ratio of the triarylamine repeat units is in the range 1-10%.